



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[EPA-R04-OAR-2020-0482; FRL-10019-57-Region 4]

Air Plan Approval; TN: Redesignation of the Sumner County

2010 Sulfur Dioxide Unclassifiable Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a State Implementation Plan (SIP) revision submitted by the State of Tennessee, through the Tennessee Department of Environment and Conservation (TDEC), on September 29, 2020, to redesignate the Sumner County, Tennessee unclassifiable area (hereinafter referred to as the “Sumner County Area” or “Area”) to attainment/unclassifiable for the 2010 1-hour primary sulfur dioxide (SO₂) national ambient air quality standard (hereinafter referred to as the “2010 SO₂ 1-hour NAAQS”). EPA now has sufficient information to determine that the Sumner County Area is attaining the 2010 1-hour SO₂ NAAQS and, therefore, is proposing to approve the State’s request and redesignate the Area to attainment/unclassifiable for the 2010 1-hour SO₂ NAAQS.

DATES: Comments must be received on or before **[Insert date 30 days after date of publication in the FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2020-0482 at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment

and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Evan Adams, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S.

Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Mr. Adams can be reached by telephone at (404) 562-9009 or via electronic mail at adams.evan@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background

The Clean Air Act (CAA or Act) establishes a process for air quality management through the establishment and implementation of the national ambient air quality standards (NAAQS). On June 2, 2010, EPA revised the primary SO₂ NAAQS, establishing a new 1-hour SO₂ standard of 75 parts per billion (ppb). *See* 75 FR 35520 (June 22, 2010).¹ After the promulgation of a new or revised NAAQS, EPA is required to designate all areas of the country, pursuant to section 107(d)(1)-(2) of the CAA. For the 2010 1-hour SO₂ NAAQS, designations were based on EPA's application of the nationwide analytical approach to, and technical assessment of, the weight of evidence for each area, including but not limited to available air quality monitoring data and air quality modeling results. In advance of designating the Sumner County Area, EPA issued updated designations guidance through a March 20, 2015, memorandum from Stephen D. Page, Director, U.S. EPA, Office of Air Quality Planning and Standards, to Air Division Directors, U.S. EPA Regions 1-10 titled, "Updated Guidance for Area

¹ On February 25, 2019 (effective April 17, 2019), based on a review of the full body of currently available scientific evidence and exposure/risk information, EPA issued a decision to retain the existing NAAQS for SO₂. *See* 84 FR 9866.

Designations for the 2010 Primary Sulfur Dioxide National Ambient Air Quality Standard,” which contained the factors that EPA evaluated in determining the appropriate designations and associated boundaries when designating the Sumner County Area, including: (1) air quality characterization via ambient monitoring or dispersion modeling results; (2) emissions-related data; (3) meteorology; (4) geography and topography; and (5) jurisdictional boundaries.^{2,3} The guidance also referenced EPA’s non-binding Monitoring Technical Assistance Document (Monitoring TAD) and Modeling Technical Assistance Document (Modeling TAD),⁴ which contain scientifically sound recommendations on how air agencies should conduct such monitoring or modeling.

EPA completed the first set of initial area designations for the 2010 1-hour SO₂ NAAQS in 2013 (Round 1). Pursuant to a March 2, 2015, consent decree and court-ordered schedule,⁵ EPA finalized a second set of initial area designations for the 2010 1-hour SO₂ NAAQS in 2016 (Round 2). The March 2, 2015, consent decree identified the following emissions criteria such that EPA must designate, in Round 2, an area surrounding any stationary source which had: (a) annual emissions in 2012 exceeding 16,000 tons of SO₂, or (b) both an annual average emissions rate of at least 0.45 pounds of SO₂ per one million British thermal units, according to EPA’s Clean Air Markets Division Database, and annual emissions of at least 2,600 tons of SO₂ in 2012. Sumner County, Tennessee contained one source, Tennessee Valley Authority (TVA) Gallatin Fossil Plant (TVA Gallatin), that met these Round 2 criteria. EPA evaluated the Area, using the five factors identified previously, during the Round 2 designations. This evaluation is discussed further in Section III of this notice. TVA Gallatin is located in north-central Tennessee

² The 2015 memorandum is available at <https://www.epa.gov/sites/production/files/2016-04/documents/20150320so2designations.pdf>.

³ This designation guidance has since been supplemented by a July 22, 2016, designation guidance memorandum from Stephen D. Page, Director, U.S. EPA, Office of Air Quality Planning and Standards, to Regional Air Division Directors, U.S. EPA Regions 1-10. The 2016 memorandum is available at <https://www.epa.gov/sites/production/files/2016-07/documents/areadesign.pdf>.

⁴ “Sulfur Dioxide (SO₂) National Ambient Air Quality Standards Designations Modeling Technical Assistance Document,” August 2016 draft, available at <https://www.epa.gov/sites/production/files/2016-06/documents/so2modelingtad.pdf>. EPA released earlier drafts of this document in May 2013 and February 2016.

⁵ See *Sierra Club et. al. v. McCarthy*, Civil Action No. 3:13-cv-3953-SI (N.D. Cal.), and 79 FR 31325 (June 2, 2014).

in the southern portion of Sumner County, approximately 5 kilometers (km) southeast of the center of Gallatin, Tennessee. TVA Gallatin is a large Electric Generating Unit that was included in the list of facilities to be designated pursuant to the March 2, 2015, Consent Decree.^{6,7}

EPA's March 20, 2015, guidance specified the designation category definitions to be used in the Round 2 designations. Specifically, EPA defined a "nonattainment" area as an area that EPA has determined violates the 2010 1-hour SO₂ NAAQS based on the most recent three years of quality-assured, certified ambient air quality monitoring data or an appropriate modeling analysis, or that EPA has determined contributes to a violation in a nearby area; and defined an "attainment" area as an area that EPA has determined meets the 2010 1-hour SO₂ NAAQS and does not contribute to a violation of the NAAQS in a nearby area based on either: (a) the most recent 3 years of ambient air quality monitoring data from a monitoring network in an area that is sufficient to be compared to the NAAQS per EPA interpretations in the Monitoring TAD, or (b) an appropriate modeling analysis. As discussed further in Section III of this notice, EPA was unable to determine whether the Sumner County Area met the definition of a nonattainment area or the definition of an attainment area based on the available information at the time of the Round 2 designations. As a result, EPA designated the Sumner County Area as unclassifiable in the Round 2 designations published on July 12, 2016.⁸ The boundary for this designation was the jurisdictional boundary of Sumner County.

Detailed rationale, analyses, and other information supporting EPA's original Round 2 designation for this Area can be found in the Round 2 designation's technical support document (TSD) for Tennessee. That TSD, along with all other supporting materials for the original 2010

⁶ TVA Gallatin was also subject to EPA's 2015 Data Requirements Rule (DRR) for the 2010 SO₂ 1-hour NAAQS. See <https://www.epa.gov/sites/production/files/2016-06/documents/tn.pdf> for Tennessee's letter dated January 15, 2016 with the Data Requirements Rule (DRR) source list.

⁷ In accordance with the DRR, 40 CFR part 51, subpart BB, through a letter dated June 7, 2016, Tennessee notified EPA that the State chose to characterize peak 1-hour SO₂ concentrations for TVA Gallatin using air quality dispersion modeling.

⁸ See 81 FR 45039 (July 12, 2016), codified at 40 CFR 81.343.

1-hour SO₂ NAAQS designation for Sumner County, can be found on EPA's SO₂ designations website.⁹ In support of this proposed redesignation action, EPA evaluated new modeling for the Sumner County Area provided by Tennessee and developed a new TSD. The TSD for this proposed action is included in the docket.¹⁰

II. What are the Criteria for Redesignating an Area from Unclassifiable to Attainment/Unclassifiable?

Section 107(d)(3)(A) of the CAA provides that the Administrator may notify the Governor of any state that the designation of an area should be revised “on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate.”¹¹ The Act further provides in section 107(d)(3)(D) that even if the Administrator has not notified a state Governor that a designation should be revised, the Governor of any state may, on the Governor's own motion, submit a request to revise the designation of any area, and the Administrator must approve or deny the request. In keeping with CAA section 107(d)(3)(A), areas that are redesignated to attainment/unclassifiable¹² must meet the requirements for attainment areas and, thus, must meet the relevant NAAQS. In addition, the area must not contribute to ambient air quality in a nearby area that does not meet the NAAQS. See the definitions for nonattainment area, attainment area, and unclassifiable area in CAA section 107(d)(1)(A)(i)-(iii).

⁹ EPA SO₂ designations website can be found at <https://www.epa.gov/sulfur-dioxide-designations>.

¹⁰ The modeling files are not included in the electronic docket for this proposed action due to their nature, size, and incompatibility with the Federal Docket Management System. These files are available at the EPA Region 4 office for review. To request these files, please contact the person listed in the notice under the section titled “FOR FURTHER INFORMATION CONTACT.”

¹¹ While CAA section 107(d)(3)(E) also lists specific requirements for redesignations, those requirements only apply to redesignations of nonattainment areas to attainment and, therefore, are not applicable in the context of a redesignation of an area from unclassifiable to attainment/ unclassifiable.

¹² Historically, EPA has designated most areas that do not meet the definition of nonattainment as “unclassifiable/attainment.” EPA has reversed the order of the label to be “attainment/unclassifiable” to better convey the definition of the designation category and so that the category is more easily distinguished from the separate unclassifiable category. See 83 FR 1098 (January 9, 2018) and 83 FR 25776 (June 4, 2018). EPA reserves the “attainment” category for when EPA redesignates a nonattainment area that has attained the relevant NAAQS and has an approved maintenance plan.

In its designations under the 2010 1-hour SO₂ NAAQS, EPA has generally defined an attainment/unclassifiable area as an area that, based on available information including (but not limited to) appropriate monitoring data and/or modeling analyses, EPA has determined meets the NAAQS and determined that the available information indicates that the area does not likely contribute to ambient air quality in a nearby area that does not meet the NAAQS. EPA is proposing to find that the Sumner County Area now meets the definition of attainment/unclassifiable based upon air quality dispersion modeling analyses that demonstrates attainment, i.e., no violations of the 2010 1-hour SO₂ NAAQS and not contributing to a nearby area that is not meeting the NAAQS. EPA preliminarily finds this information sufficient for the purposes of redesignating an area from unclassifiable to attainment/unclassifiable. Such redesignations are functionally similar to initial designations and are not subject to CAA section 107(d)(3)(E), which, amongst other things, requires attainment to be due to permanent and enforceable measures and which requires a demonstration that the area will maintain the NAAQS for 10 years.

III. What is EPA's Rationale for Proposing to Redesignate the Area?

The Sumner County Area was designated unclassifiable by EPA on July 12, 2016. EPA's rationale for the unclassifiable designation is fully explained in the TSD associated with that action.¹³ As discussed in the final TSD, the revised modeling provided by Tennessee in March 2016 for the final designation action used allowable SO₂ emissions rates from the TVA Gallatin facility that had not yet been made federally enforceable. Additionally, the final modeling analysis did not appropriately account for background SO₂ concentrations in the Area which was considered inconsistent with EPA's Modeling TAD and modeling guidelines in 40 CFR Part 51, Appendix W.

¹³ The final Round 2 designations TSD can be found at https://www.epa.gov/sites/production/files/2016-07/documents/r4_tn_final_designation_tsd_06302016.pdf.

Tennessee submitted an updated modeling analysis with its letter signed by Michelle Owenby, Director of TDEC's Division of Air Pollution Control, on September 29, 2020, requesting that EPA redesignate Sumner County, Tennessee, to attainment/unclassifiable for the 2010 1-hour SO₂ NAAQS.¹⁴ This updated modeling was performed using the current version of EPA's recommended dispersion model, AERMOD version 19191, with the most recent three years of actual SO₂ emissions (2017-2019) from the TVA Gallatin facility and concurrent meteorology data. Additionally, the updated modeling used recent 2016 land cover data and appropriately accounted for background SO₂ concentrations in the Area. The TSD included in the docket for this proposed redesignation action provides a detailed summary of Tennessee's modeling analysis and EPA's evaluation of the modeling.

According to EPA's guidance on redesignations, SO₂ nonattainment areas using modeling to demonstrate attainment for a redesignation request are expected to use maximum allowable emissions.¹⁵ However, this statement derives from the requirements of CAA section 107(d)(3)(E), which applies only to the redesignation of nonattainment areas to attainment. For redesignations of unclassifiable areas, the necessary analysis is equivalent to what would be required in a designation in the first instance since EPA has not found the area to be attainment or nonattainment. In this first instance, the goal is to characterize existing ambient air quality. As such, it is appropriate to use actual emissions for estimating existing air quality. EPA's acceptance of modeling using actual emissions in this instance should not be construed to define

¹⁴ The demonstration of attainment through air quality dispersion modeling requires an area to review and report annual SO₂ emissions pursuant to DRR ongoing verification at 40 CFR 51.1205(b). In its September 29, 2020, redesignation request letter, Tennessee also requested to terminate the section 51.1205(b) annual reporting requirement because the modeling analyses demonstrated a value of at least 50 percent below the 2010 1-hour SO₂ NAAQS at all receptors. EPA will address the annual reporting termination request in a separate action which has no bearing on the proposed approval of the redesignation.

¹⁵ "Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions," April 2014, at 67, available at https://www.epa.gov/sites/production/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf; "Use of Actual Emissions in Maintenance Demonstrations for Ozone and Carbon Monoxide (CO) Nonattainment Areas," November 1993, at 3, available at https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/19931130_berry_actual_emissions_ozone_co_maintenanc_e_demos%20.pdf.

what would be needed for a demonstration of attainment and maintenance for purposes of a redesignation of a nonattainment area to attainment.

After reviewing Tennessee's request under CAA section 107(d)(3)(D) and all available information, EPA is proposing to find that the modeling provided by the State comports with EPA's current Modeling TAD and EPA's Guideline on Air Quality Models (40 CFR part 51 Appendix W) and is acceptable for assessing the attainment status of the Sumner County Area. The State's modeling indicates that the predicted maximum design value at any receptor in the modeling domain is 60.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), or 23.1 ppb.¹⁶ EPA's review confirms that the modeling results appropriately characterize the air quality in the Sumner County Area that predicted ambient SO_2 concentrations are below the 2010 1-hour SO_2 NAAQS of 196.4 $\mu\text{g}/\text{m}^3$, or 75 ppb.¹⁷ Additionally, there is no evidence of monitored or modeled violations in the surrounding counties such that the source is contributing to any nearby area that does not meet the NAAQS. EPA is therefore proposing to approve Tennessee's redesignation request and proposing to redesignate the entirety of Sumner County that was designated as unclassifiable in July 2016 to attainment/unclassifiable based on the currently available information that demonstrates attainment of the 2010 1-hour SO_2 NAAQS.

IV. Proposed Action

EPA is proposing to approve Tennessee's September 29, 2020, redesignation request and to redesignate the Sumner County Area from unclassifiable to attainment/unclassifiable for the 2010 1-hour SO_2 NAAQS. EPA has reviewed the modeling provided by the State with its redesignation request and preliminarily finds that it complies with EPA's current Modeling TAD and EPA's Guideline on Air Quality Models (40 CFR part 51 Appendix W) and is acceptable for assessing the attainment status of the Sumner County Area. If finalized, approval of the

¹⁶ The SO_2 NAAQS and the design value compared to the NAAQS is the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations.

¹⁷ See the TSD in the docket for this proposed action for further information and analysis of the updated modeling.

redesignation request would change the legal designation, found at 40 CFR Part 81, of Sumner County from unclassifiable to attainment/unclassifiable for the 2010 1-hour SO₂ NAAQS.

V. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment/unclassifiable is an action that affects the status of a geographical area and does not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment/unclassifiable does not create any new requirements. Accordingly, this proposed action merely proposes to redesignate an area to attainment/unclassifiable and does not impose additional requirements. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Will not have disproportionate human health or environmental effects under Executive Order 12898 (59 FR 7629, February 16, 1994).

This proposed action does not apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, this proposed action does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

40 CFR Part 81

Environmental protection, Air pollution control.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: February 25, 2021.

John Blevins,
Acting Regional Administrator,
Region 4.

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